an even higher ratio (3.4) observed in fetal cord blood obtained from women fed a 1:1 mixture of RRR- and all-rac-α-tocopherol acetate just before giving birth (4).

The higher RRR:rac observed in human plasma, and eventually in tissues, implies that a greater degree of discrimination occurs in humans than in rats. The rapid disappearance of SRR-α-tocopherol from human plasma after a single 1:1 dose of RRR- and SRR-α-tocopheryl acetate (ie, ambo-α-tocopherol) (5, 6) suggests that most, if not all, of the 2S forms are eventually eliminated because the behavior of SRR-α-tocopherol more or less approximates that of the four 2S stereoisomers (2). If the four 2R forms behave like RRR-α-tocopherol (2), a limiting RRR:rac value of ≈2 will result.

The main source of discrimination is likely the liver tocopherol transfer protein (TTP), which is of major importance for vitamin E homeostasis in humans (7). Indeed, rat TTP shows an ≈2-fold greater affinity for RRR- than for all-rac-α-tocopherol (8). Determination of the extent to which TTP controls recycling and redistribution, as well as uptake, of vitamin E would reveal its importance in controlling tissue bioavailability. We suggest that reassessment of relative bioavailability for human nutritional and health needs is appropriate, bearing in mind that most benefits of the vitamin are of a long-term nature.

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**REFERENCES**


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**Definition of sensitivity and specificity**

Dear Sir:

I noticed a technically incorrect definition in an otherwise interesting and potentially important article published recently in the Journal (1). The authors state in the introduction that “Sensitivity (proportion of subjects classified as ‘positive’ by both the screening and reference tests) and specificity (proportion of subjects classified as ‘negative’ by both tests) are calculated…” The wording “proportion of subjects” implies that the total number of subjects was the denominator.

Reference to any standard epidemiologic text will reveal that sensitivity is correctly and unambiguously defined as the proportion of reference test positive (diseased) subjects who test positive with the screening test. Note that the denominator is the number of reference test positive subjects, not the total number of subjects. Similarly, specificity is defined as the proportion of reference test negative (healthy) subjects who test negative with the screening test. Judging from the results, it seems likely that the authors used the correct denominator, but readers should be aware that the text is not technically correct.

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**Reply to RM Lazarus**

Dear Sir:

Lazarus pointed out that the wording we used to define sensitivity and specificity in a recent article could be misinterpreted (1). He is of